

DRAWING AMENDMENTS

Two new reference characters, 1A and 1B for newly added elements that were described in the original specification, have been amended to Figs. 3 and 4 of the drawings in red ink along with the new element. A drawing amendment approval request form is enclosed herewith, as pursuant to MPEP 608.02(v).

REMARKS-General

1. The newly drafted independent claim 14 incorporates all structural limitations of the original claim 1 and includes further limitations previously brought forth in the disclosure. No new matter has been included. All new claims 14-17 are submitted to be of sufficient clarity and detail to enable a person of average skill in the art to make and use the instant invention, so as to be pursuant to 35 USC 112.

Response to Rejection of Claims 1-13 under 35USC103

2. The Examiner rejected claims 1-13 over Wang et al. (US 6,382,307) in view of Lee (US 6,619,381). Pursuant to 35 U.S.C. 103:

“(a) A patent may not be obtained though the invention is **not identically** disclosed or described as set forth in **section 102 of this title**, if the **differences** between the subject matter sought to be patented and the prior art are such that the **subject matter as a whole would have been obvious** at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.”

3. In view of 35 U.S.C. 103(a), it is apparent that to be qualified as a prior art under 35USC103(a), the prior art must be cited under 35USC102(a)~(g) but the disclosure of the prior art and the invention are not identical and there are one or more differences between the subject matter sought to be patented and the prior art. In addition, such differences between the subject matter sought to be patented **as a whole** and the prior art are obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains.

4. In other words, the differences between the subject matter sought to be patent as a whole of the instant invention and Wang which is qualified as prior art of the instant invention under 35USC102 are obvious in view of Lee at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains.

5. The applicant respectfully submits that in order to determine whether the differences between the subject matters sought to be patent as a whole of the instant invention and the primary prior art, Wang et al, are obvious in view of the supplemental

cited art, Lee, we have to identify all the differences between the claims of the instant inventions and Wang et al. The applicant respectfully identifies the differences between the claims of the instant invention and Wang et al as follows:

(a) In claim 14, "a heat guiding channel having a circular integrally protruded from the heat dissipating surface of the plate body" is claimed for heat dissipation, wherein Wang merely a heat dissipating fin set 2 has a through hole 3 without any mention of any guiding channel integrally protruded from the heat dissipating fin set 2. The applicant respectfully submits that when the heat dissipating members of the instant invention are mounted side-by-side, the heat guiding channels are coaxially aligned to form an elongated heat conducting conduit. However, Wang merely teaches the combining portion 4 extended from a bottom side edge of the through hole 3 such that the heat dissipating fin set 2 is engaged to the heat tube 1 by the engagement of the through hole and the combining portion. In other words, the combining portions 4 of the heat dissipating fin sets 2 cannot form any elongated heat conducting conduit when the heat dissipating fin sets 2 are mounted side-by-side. It is apparent that Wang fails to teach the elongated heat conducting conduit is formed by coaxially aligning the circular heat guiding channels with each other.

(b) In claim 14, "a folding arm integrally and bendably extended from the peripheral edge of the plate body" is claimed to transversely bend to overlap with the folding arm of another adjacent plate body so as to enhance a contacting area between the heat dissipating members, wherein Wang fails to teach any folding arm adapted to foldably bend to contact with adjacent heat dissipating fin set 2.

(c) In claim 14, "an engaging arm integrally and bendably extended from the peripheral edge of the plate body at a position adjacent to the folding arm" is claimed to lock up the plate bodies with each other, wherein Wang merely discloses a plurality of clips in the figures. Besides, Wang does not verbally suggest any clip at the fin. In other words, there is no description in Wang regarding to clip. In addition, Wang fails to teach any part or component of the heat dissipating fin set 2 adapted to be bent to engage with adjacent heat dissipating fin set 2.

(d) Wang fails to teach the engaging arm having a Y-shape is integrally extended from the peripheral edge of the plate body in a bendable manner as claimed in

claim 14. Accordingly, the main objective of the instant invention is to provide a heat dissipating arrangement wherein the heat dissipating members are selectively to be assembled to effectively dissipate the heat from the computer. The bendable parts, i.e. the engaging arm and the folding arm, of the instant invention allow the user to selectively assemble a predetermined numbers of the heat dissipating member for installing into the computer.

(e) Wang fails to teach the engaging arm has a narrowed root portion bendably and outwardly extended from the peripheral edge of the plate body and an engaging head portion extending from the root portion as claimed in claim 14. The applicant respectfully submits that the root portion of the engaging arm is bent to transversely extend from the heat dissipating surface, wherein Wang does not suggest any engaging arm having the root portion adapted to bend transversely with respect to the heat dissipating fin set 2.

(f) Wang fails to teach and suggest the engaging head portion of each of the engaging arms forms two engaging wings adapted to engage with the root portion of another the engaging arm as claimed in claim 14.

(g) Wang fails to teach the two engaging wings are symmetrically identical and the root portion of the engaging arm is bent 90 degrees to engage said engaging wings of said engaging arm with the root portion of another corresponding engaging arm at the peripheral edge of the plate body as claimed in claim 15 in addition to what is claimed in claim 14.

(h) Wang fails to teach the folding arm is downwardly bent 90 degrees to transversely extend from the heat dissipating surface of the plate body to overlap with the folding arm of another the heat dissipating member as claimed in claims 16 and 17 in addition to what is claimed in claim 14.

6. Whether the claims 14 to 17 as amended of the instant invention are obvious depends on whether the above differences (a) to (h) between the instant invention and Wang et al are obvious in view of Lee at the time of the invention was made.

7. Furthermore, the applicant respectfully submits that when applying 35 USC 103, the following tenets of patent law must be adhered to:

- (a) The claimed invention must be considered as a whole;
- (b) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination;
- (c) The references must be viewed without the benefit of hindsight vision afforded by the claimed invention; and
- (d) Reasonable expectation of success is the standard with which obviousness is determined.

Also, "The mere fact that a reference could be modified to produce the patented invention would not make the modification obvious unless it is suggested by the prior art." *Libbey-Owens-Ford v. BOC Group*, 4 USPQ 2d 1097, 1103 (DCNJ 1987).

8. Lee merely teaches a Y-shaped connector extending from each of the upper and lower edges of the fin to engage with the aperture in the upper and lower edge of an adjacent fin without any suggestion of how to lock up the fins by bending the root portion of the connector. Lee merely teaches the wings 130, 140 are bendable without any mention of any engaging arm having the bendable root portion. Throughout the description of Lee, Lee merely suggests to combine the fins, in column 2, lines 54-56, the Y-shaped connectors are inserted into the apertures of the adjacent fin while the wings are bent inward to engage with the adjacent fin. In other words, the structural difference between the engaging arm of the instant invention and the connector of Lee is that the engaging arm of the instant invention allows the user to bend the root portion to lock up the heat dissipating members while the connector of Lee requires the user to align the wings with the apertures so as to bend down the wings for engaging the fins. The applicant respectfully submits that the connector of Lee is not equivalent to the engaging arm of the instant invention. Therefore, Lee fails to teach, as it is claimed in claim 14, the user must bendably fold the root portion of the engaging arm to engage the head portion thereof with the root portion of the adjacent engaging arm. It is worth to mention that in order to disassemble the heat dissipating members, the user can be simply fold the root portion of the engaging arm until the head portion thereof disengage

with the root portion of the adjacent engaging arm. However, the connector of Lee requires the user to unbend the wings 130, 140 for disassembling the fins.

9. In addition, Lee fails to teach the folding arm is integrally and bendably extended from the peripheral edge of the plate body wherein the folding arm is bent to overlap with the folding arm of the adjacent plate body. The applicant respectfully submits the heat dissipating member provides the bendable folding arm and the bendable engaging arm to allow the user self-assembling the dissipating members thus saving producing time and lowering ratio of disqualification. In other words, the manufacturing cost of the fin taught by Lee is relatively high because the fin must be precisely manufactured that the length of each upper and lower plate 11, 12 of the fin is accurately measured and the wings must precisely align with the apertures of the adjacent fin for engagement.

10. "To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the examiner to show a motivation to combine the references that create the case of obviousness. In other words, the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited art references for combination in the manner claimed... [T]he suggestion to combine requirement stands as a critical safeguard against hindsight analysis and rote application of the legal test for obviousness..." *In re Gorman*, 933 F.2d 982, 986, 18 USPQ 2d 1885, 1888 (Fed. Cir. 1991).

11. Accordingly, the applicant believes that neither Wang et al nor Lee, separately or in combination, suggests or makes any mention whatsoever of the difference subject features (a) to (h) as claimed in the amended claims 14 to 17 of the instant invention.

12. Applicant believes that for all of the foregoing reasons, all of the claims are in condition for allowance and such action is respectfully requested.

The Cited but Non-Applied References

13. The cited but not relied upon references have been studied and are greatly appreciated, but are deemed to be less relevant than the relied upon references.

14. The front cover sheet of the instant invention submitted on July 23, 2003 showed there is a priority claim of China Application having an application number 02265682.0 and a filing date of July 23, 2002. The Filing Receipt of the instant invention shows the foreign application of the China Application having an application number 02265682.0 and a filing date of July 23, 2002. The applicant, Shi-Feng Shao, hereby claims foreign priority benefits under 35 USC 119 of the foreign application for patent or inventor's certificate, China application having an application number 02265682.0 and a filing date of July 23, 2002, and has also identified above the foreign application for patent or inventor's certificate having a filing date before that of the application on when priority is claimed.

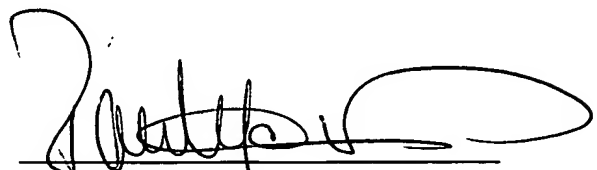
15. A set of formal drawings, Figures 3 and 4 as the replacement sheet, are submitted herewith to replace the corresponding original figures in file upon the approval of the proposed drawing correction of Figure 3 and 4.

16. The Abstract as a new page is enclosed therewith to replace the original abstract.

17. In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration and withdrawal of the objection are requested. Allowance of claims 14-17 at an early date is solicited.

18. Should the Examiner believe that anything further is needed in order to place the application in condition for allowance, he is requested to contact the undersigned at the telephone number listed below.

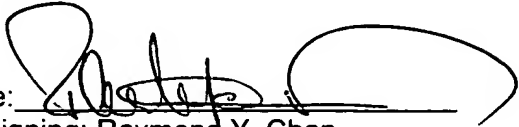
Respectfully submitted,



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CERTIFICATE OF MAILING

I hereby certify that this corresponding is being deposited with the United States Postal Service by First Class Mail, with sufficient postage, in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" on the date below.

Date: 06/16/2006Signature: 
Person Signing: Raymond Y. Chan